

What is claimed is:

Sub D1

1. A substantially purified T-cell receptor beta-like protein comprising the amino acid sequence of SEQ ID NO:1 or fragments thereof.

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2. A variant of T-cell receptor beta-like protein having at least 90% amino acid identity to SEQ ID NO:1 and which retains at least one functional characteristic of T-cell receptor beta-like protein.

Sub D2

3. An isolated and purified polynucleotide sequence encoding the T-cell receptor beta-like protein of claim 1 or fragments or variants of said polynucleotide sequence.

4. A composition comprising the polynucleotide sequence of claim 3.

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5. A polynucleotide sequence which hybridizes to the polynucleotide sequence of claim 3.

6. A polynucleotide sequence which is complementary to the polynucleotide sequence of claim 3 or fragments or variants thereof.

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7. An isolated and purified polynucleotide sequence comprising SEQ ID NO:2 or fragments or variants thereof.

8. A composition comprising the polynucleotide sequence of claim 7.

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9. A polynucleotide sequence which is complementary to the polynucleotide sequence of claim 7.

10. An expression vector containing at least a fragment of the polynucleotide sequence of claim 3.

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11. A host cell containing the vector of claim 10.
12. A method for producing a polypeptide comprising the amino acid sequence of SEQ ID NO:1, or a fragment thereof, the method comprising the steps of:
- 5 a) culturing the host cell of claim 11 under conditions suitable for the expression of the polypeptide; and
- b) recovering the polypeptide from the host cell culture.
13. A pharmaceutical composition comprising a substantially purified T-cell
10 receptor beta-like protein having the amino acid sequence of SEQ ID NO:1 in conjunction with a suitable pharmaceutical carrier.
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14. A purified antibody which specifically binds to the polypeptide of claim 1.
15. A purified agonist of the polypeptide of claim 1.
16. A purified antagonist of the polypeptide of claim 1.
17. A method for treating a cancer comprising administering to a subject in need
20 of such treatment an effective amount of the pharmaceutical composition of claim 13.
18. A method for treating a cancer comprising administering to a subject in need of such treatment an effective amount of the agonist of claim 15.
- 25 19. A method for treating an autoimmune disorder comprising administering to a subject in need of such treatment an effective amount of the antagonist of claim 16.
20. A method for detecting a polynucleotide which encodes T-cell receptor beta-like protein in a biological sample comprising the steps of:
- 30 a) hybridizing the polynucleotide of claim 6 to nucleic acid material of a

biological sample, thereby forming a hybridization complex; and

b) detecting said hybridization complex, wherein the presence of said complex correlates with the presence of a polynucleotide encoding T-cell receptor beta-like protein in said biological sample.

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21. The method of claim 18 wherein the nucleic acid material is amplified by the polymerase chain reaction prior to hybridization.

add B2

add
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